I CLAIM:

1. An injection molding apparatus comprising:

a plurality of mold cavities formed between at least one pair of mold plates, each cavity having a gate for communicating with an interior of said cavity;

at least one injection molding nozzle body having a back end, a front end, at least one melt channel through said body and a heating member for heating said body, said nozzle body capable of receiving heated pressurized melt from a source and capable of feeding said heated pressurized melt from said back end through said melt channel to said front end; and

a nozzle end mounted to said front end of said nozzle body, said nozzle end having a bore therethrough extending from said melt channel at said body front end and communicating with at least two of said mold cavities, said nozzle end being made substantially of a material having a higher thermal conductivity than said nozzle body.

2. The apparatus of claim 1 wherein said nozzle end bore is defined in said higher thermally conductive material.

3. The apparatus of claim 1 wherein a rear portion of said nozzle end extends inside said nozzle body.

4. The apparatus of claim 3 wherein said rear portion of said nozzle end extends inside a heated portion of said nozzle body.

5. The apparatus of claim 3 wherein said rear portion of said nozzle end is made of a material having a higher thermal conductivity than said nozzle body.

6. The apparatus of claim 1 wherein said nozzle end is removably mounted to said nozzle body.

7. The apparatus of claim 1 further comprising at least one nozzle tip removably mounted to said nozzle end, said nozzle tip having a tip melt channel therethrough for receiving pressurized melt from said nozzle end bore and delivering said pressurized melt to at least one mold gate.

8. The apparatus of claim 1 further comprising sealing means for inhibiting leakage of pressurized melt between said nozzle end and said mold.

9. In an injection molding apparatus having at least one heated nozzle extending forwardly into a well in a mold, said well having a wall with a plurality of gates spaced therein, each gate extending to a cavity in said mold, said nozzle having a rear end, a front end and a melt channel, said melt channel extending from an inlet at said rear end of said nozzle to an outlet at said front end of said nozzle, the improvement comprising:

a nozzle end mounted to said front end of said nozzle, said nozzle end having a bore therethrough adapted to extend from said melt channel outlet at said front end of said nozzle and to communicate with said plurality of gates, said nozzle end being made substantially of a material having a higher thermal conductivity than said nozzle.

10. The apparatus of claim 9 wherein said nozzle end bore is defined in said higher thermally conductive material.

11. The apparatus of claim 9 wherein a rear portion of said nozzle end extends inside said nozzle.

12. The apparatus of claim 11 wherein said rear portion of said nozzle end extends inside a heated portion of said nozzle.

13. The apparatus of claim 11 wherein said rear portion of said nozzle end has a higher thermally conductivity than said nozzle.

14. The apparatus of claim 1 wherein said nozzle end is removably mounted to said nozzle body.

15. An injection molding apparatus comprising:

at least one mold cavity formed between at least one pair of mold plates, said cavity having a gate for communicating with an interior of said cavity;

at least one injection molding nozzle body having a back end, a front end, at least one melt channel through said body and a heater for heating said body, said nozzle body capable of receiving heated pressurized melt from a source and capable of feeding said heated pressurized melt from said back end through said melt channel to said front end; and

a nozzle end mounted to said front end of said nozzle body, said nozzle end having a bore therethrough extending from said melt channel at said body front end and communicating with said mold cavity, said bore having a portion extending substantially perpendicularly to said melt channel, said nozzle end being made substantially of a material having a higher thermal conductivity than said nozzle body.

16. The apparatus of claim 15 wherein said nozzle end bore is defined in said higher thermally conductive material.

17. The apparatus of claim 15 wherein a rear portion of said nozzle end extends inside said nozzle body.